

IN THE CLAIMS:

1. (Currently Amended) An infrared communication device comprising:

a substrate having a longitudinal X-direction and a lateral Y-direction;

a plurality of infrared rays emitting elements mounted on the substrate and arranged in the X-direction;

an infrared rays receiving element mounted on the substrate at a position in the X-direction;

a first lens elongated in the X-direction and provided on the infrared rays emitting elements; and

a semispherical second lens provided on the infrared rays receiving element;

the first lens having an elongated convex shape having two convex opposing end portions, and having a length longer than a length of the arrangement of the infrared rays emitting elements,

a sectional shape of the first lens in the X-direction and a position of each of the infrared rays emitting elements with respect to the sectional shape of the first lens being selected, so that infrared rays radiation range is expanded in the X-direction over the two convex opposing end portions of first lens;

wherein the first lens and the second lens being formed into an integral one-piece lens and secured to the substrate.

2. (Original) The infrared communication device according to

claim 1 wherein the first lens has a semi-cylindrical shape.

3. (Original) The infrared communication device according to claim 1 wherein the first lens has an elongated semi-spherical shape.

5. (Original) The infrared communication device according to claim 1 wherein the first lens is elongated in a horizontal direction.

6. (Original) The infrared communication device according to claim 1 further comprises a reflective cup enclosing the first lens.